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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------|------------------------------------|-----------------------|---------------------|------------------|
| 10/650,409 | 08/27/2003 | Xiadong Mao | SONYP028 | 6558 |
| | 590 02/22/2007 ILLA & GENCARELI | EXAMINER | | |
| 710 LAKEWAY | | . KURR, JASON RICHARD | | |
| SUITE 200 SUNNYVALE, CA 94085 | | | ART UNIT | PAPER NUMBER |
| | | | 2615 | |
| | · | | | |
| SHORTENED STATUTORY | PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 31 DA | YS | 02/22/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | | Applicat | Application No. Applicant(s) | | | | | |
|--|---|---|--|---|---------|--|--|--|
| | | 10/650, | 409 | MAO, XIADONG | | | | |
| | | Examine | er | Art Unit | | | | |
| | | Jason R | . Kurr | 2615 | | | | |
| Period fo | The MAILING DATE of this communi or Reply | cation appears on ti | he cover sheet | with the correspondence ac | idress | | | |
| WHIC - Exter after - If NO - Failu Any (| ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MANSIONS OF time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication of the period for reply is specified above, the maximum stare to reply within the set or extended period for reply reply received by the Office later than three months after a patent term adjustment. See 37 CFR 1.704(b). | AILING DATE OF T of 37 CFR 1.136(a). In no e unication. tutory period will apply and will, by statute, cause the ap | THIS COMMUI event, however, may will expire SIX (6) M pplication to become | NICATION. The a reply be timely filed CONTHS from the mailing date of this of ABANDONED (35 U.S.C. § 133). | · | | | |
| Status | | | | • | • | | | |
| 1)⊠ | Responsive to communication(s) file | d on 27 August 200 | D 3 . | | | | | |
| · — | • | b)⊠ This action is | · | | | | | |
| . ' | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| -/ | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | on of Claims | | | | | | | |
| 4)⊠ | Claim(s) 1-39 is/are pending in the a | polication. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | | |
| ·- | 6) Claim(s) is/are rejected. | | | | | | | |
| · | Claim(s) is/are objected to. | | | | | | | |
| • | Claim(s) <u>1-39</u> are subject to restriction | on and/or election re | equirement. | | • | | | |
| | ion Papers | | · | | | | | |
| | • | - Fyaminas | | | | | | |
| · · | The specification is objected to by the | | h\□ ahiaatad | to by the Evaminer | | | | |
| 10) | 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| , — | • | by the Examiner. | Total the attack | ied Office Addon of Toffin 1 | 10 102. | | | |
| • | ınder 35 U.S.C. § 119 | • | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| | | | | | | | | |
| Attachmen | t(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SR/08) 5) Notice of Informal Patent Application | | | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other: | | | | | | | | |

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Election/Restrictions

This application contains claims directed to the following patentably distinct species:

- I. Claims 1-6 and 14-19, drawn to a method and program for processing an audio signal through adaptive beam-forming as in figure 4, classified in class 381, subclass 92.
- II. Claims 7-13 and 20-39, drawn to methods and devices for reducing noise by separating a source component from a noise component as in figure 6, classified in class 381, subclass 94.7.

The species are independent or distinct because Invention I discloses a method wherein adaptive and inverse beam-forming are used to provide an enhanced source component and an enhanced noise component, whereas Invention II discloses a method that enhances a target signal on one channel and blocks it on the other. Inventions I and II do not rely on the details of the other, they are mutually exclusive.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim

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is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Kurr whose telephone number is (571) 272-0552. The examiner can normally be reached on M-F 10:00am to 6:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 273-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JK JK

> VIVIAN CHIN SHEEDING THY PATL HT EXAMINER Y CHNTER 2500